

PROJECT DESCRIPTION

GENERAL:

THIS PROJECT INVOLVES THE MODIFICATION OF AN HIB TO A FULL COLOR ON DEMAND TRAFFIC SIGNAL AT MD 213 AND US 301 SOUTHBOUND IN QUEEN ANNES COUNTY.

MD 213 IS ASSUMED TO RUN IN AN NORTH-SOUTH DIRECTION.

INTERSECTION OPERATION:

THE INTERSECTION OPERATES IN A NEMA FOUR PHASE, FULL-ACTUATED MODE. MD 213 THROUGH MOVEMENTS OPERATE CONCURRENTLY, WITH AN EXCLUSIVE/PERMISSIVE LEFT TURN FOR MD 213 NORTHBOUND APPROACH. THE RAMP FROM US 301 SOUTHBOUND WILL OPERATE ALONE. SEE NOTE UNDER PHASE CHART FOR NORMAL OPERATION.

CONTROLLER INFORMATION:

A NEMA EIGHT-PHASE, FULL-ACTUATED CONTROLLER WITH ALL NECESSARY EQUIPMENT HOUSED IN A POLE-MOUNTED CABINET SHALL BE INSTALLED AT THE INTERSECTION.

PROJECT CONTACTS

CONTACT PERSONS FOR DISTRICT 2 ARE AS FOLLOWS:

MR. ROBERT KIEL  
ASSISTANT DISTRICT  
ENGINEER - TRAFFIC  
PHONE: (410) 810-3240

MR. TERRY O. WRIGHT  
ASSISTANT DISTRICT  
ENGINEER - MAINTENANCE  
PHONE: (410) 810-3250

MR. BARRY CLOTHIER  
ASSISTANT DISTRICT  
ENGINEER - UTILITIES  
410-810-3275

CONTACT FOR OFFICE OF  
TRAFFIC AND SAFETY:

MR. RICHARD L. DAFF, SR.  
CHIEF, TRAFFIC OPERATIONS DIVISION  
PHONE: (410) 787-7630

MR. ROBERT SNYDER  
ASSISTANT DIVISION CHIEF -  
TRAFFIC OPERATIONS DIVISION  
(410) 787-7630

MR. ED RODENHIZER  
TEAM LEADER - SIGNAL OPERATIONS  
(410) 787-7650

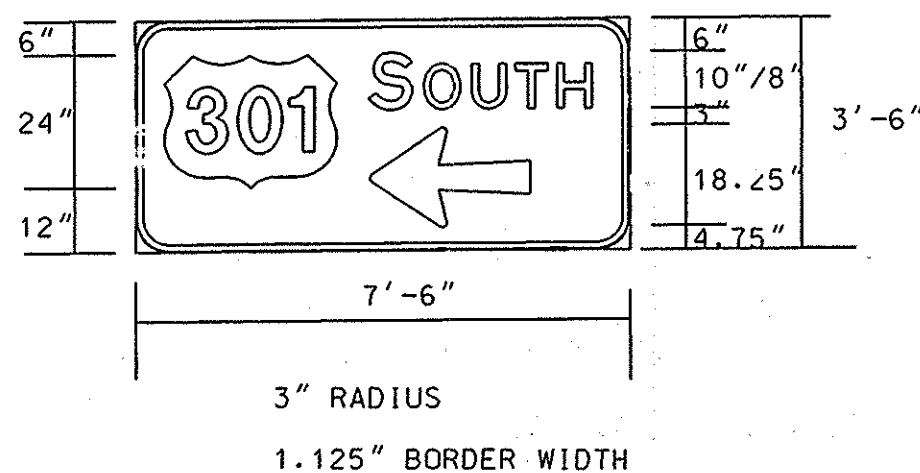
MR. EUGENE BAILEY  
TEAM LEADER - SIGN OPERATIONS  
(410) 787-7676

EQUIPMENT LIST "A"

A. EQUIPMENT TO BE SUPPLIED BY THE SHA

ITEM #	QUANTITY	DESCRIPTION
9042	1 EA	NEMA EIGHT PHASE, FULL-TRAFFIC-ACTUATED CONTROLLER, VIDEO DETECTION UNIT, TWO 4-CHANNEL AMPLIFIERS AND ALL NECESSARY EQUIPMENT HOUSED IN A POLE MOUNTED CABINET.
9000	26.25 SF	SHEET ALUMINUM
		1 EA SHEET ALUMINUM SIGN 7'-6"x3'-6" GREEN BACKGROUND M1-4 30" x 24" 10"x8" "SOUTH" A-2 ARROW @ 180°

SIGNING DETAIL FOR SIGN 8  
SEE CONSTRUCTION DETAIL "C"  
ON THE SIGNAL PLAN FOR  
INSTALLATION LOCATION

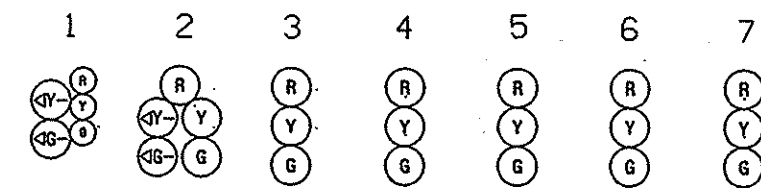


EQUIPMENT LIST "B"

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR

ITEM NO.	QUANTITY	DESCRIPTION
1001	1 EA	MAINTENANCE OF TRAFFIC PER ASSIGNMENT
8001	22 EA	FURNISH AND INSTALL 12 INCH LED SIGNAL HEAD SECTION
8004	3 EA	FURNISH AND INSTALL 8 INCH LED SIGNAL HEAD SECTION
8022	1 EA	REMOVE AND DISPOSE OF MATERIALS AND EQUIPMENT PER ASSIGNMENT
8026	3 EA	FURNISH AND INSTALL VIDEO DETECTION CAMERA & CABLE
8027	7 LF	FURNISH AND INSTALL 1 INCH DETECTOR SLEEVE GALVANIZED
8038	26.25 SF	INSTALL OVERHEAD OR GROUND MOUNTED SIGN
8055	75 LF	FURNISH AND INSTALL ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 A.W.G.)
8058	420 LF	FURNISH AND INSTALL LOOP WIRE ENCASED IN FLEXIBLE TUBING
8059	92 LF	SAW CUT FOR SIGNAL (LOOP DETECTOR)
8063	1 EA	INSTALL CONTROLLER AND CABINET - POLE MOUNTED

PHASING CHART

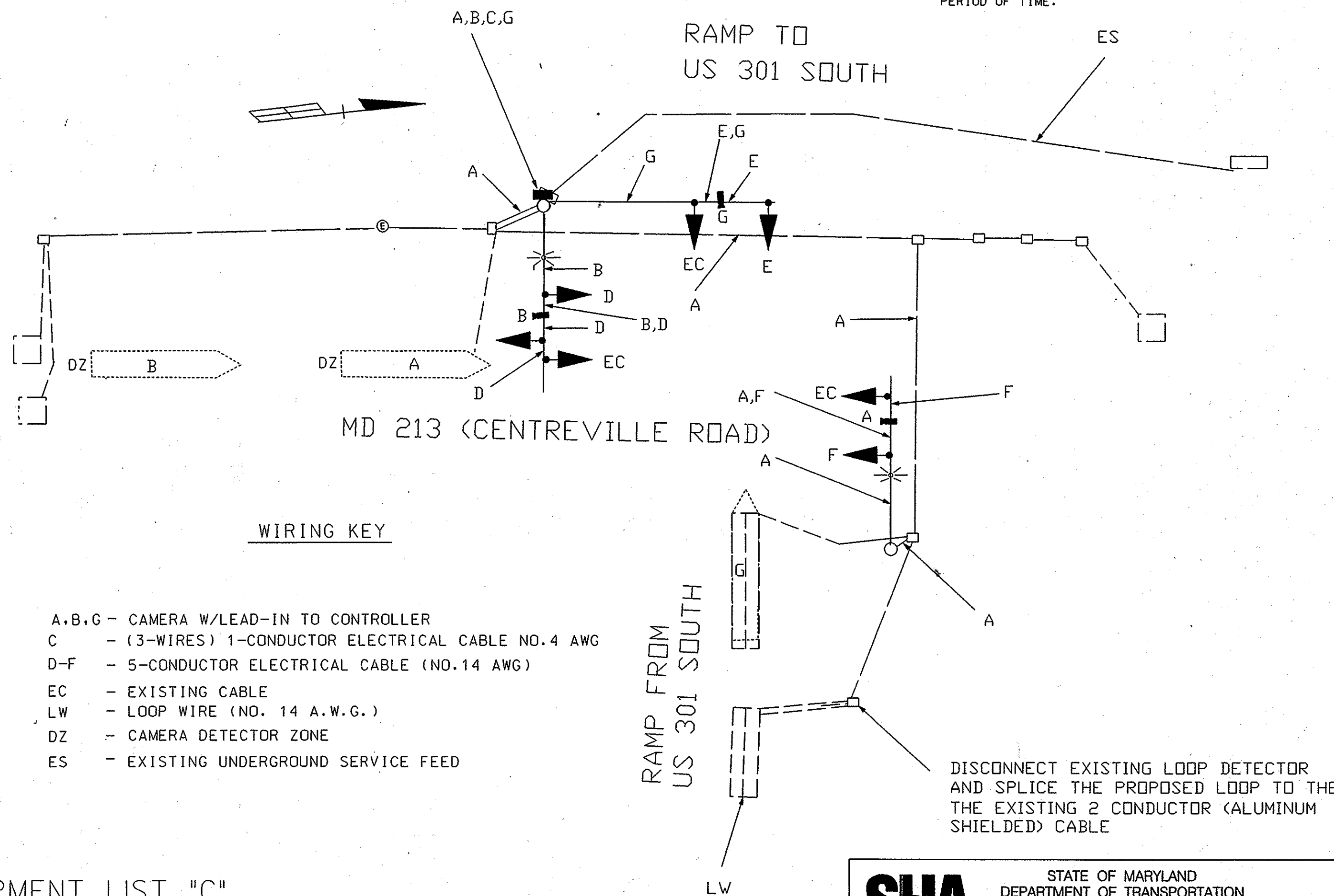


Phase 1 + 6	1	2	3	4	5	6	7	
1 Change	G	G	G	R	R	R	R	
Phase 2 + 6	G	G	G	G	G	R	R	
2 + 6 Change	Y	Y	Y	Y	Y	R	R	
Phase 4	R	R	R	R	R	G	G	
4 Change	R	R	R	R	R	Y	Y	
Flashing Operation	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	

GENERAL NOTES

THIS SIGNAL WILL OPERATE AS AN ON DEMAND SIGNAL. NORMAL OPERATION IS FLASHING ONCE TRAFFIC CALLS THE QUEING LOOPS SIGNAL WILL OPERATE FOR PERIOD OF TIME.

WIRING DIAGRAM



EQUIPMENT LIST "C"

C. EQUIPMENT TO BE REMOVED BY THE CONTRACTOR.

QUANTITY	DESCRIPTION
1 EA	CONTROLLER AND CABINET - POLE MOUNTED

ALL REMOVED SIGNAL MATERIALS ARE TO BECOME THE PROPERTY OF THE CONTRACTOR

TOD No.: AT909-01  
SHA No.: QA342A51/BS1

**CENTURY ENGINEERING, INC.**  
CONSULTING ENGINEERS - PLANNERS  
32 WEST ROAD  
TOWSON, MARYLAND 21204  
25003.41

**SHA** STATE OF MARYLAND  
DEPARTMENT OF TRANSPORTATION  
STATE HIGHWAY ADMINISTRATION  
OFFICE OF TRAFFIC & SAFETY  
TRAFFIC ENGINEERING DESIGN DIVISION  
TRAFFIC SIGNAL PLAN  
MD 213 INTERCHANGE AND US 301 NORTH  
RAMP, US 301 SOUTHBOUND RAMP

SCALE N/A DATE 6-01-2006 CONTRACT NO. AT9095185

DESIGNED BY DLA COUNTY QUEEN ANNES  
DRAWN BY DLA LOGMILE 17021305.32  
CHECKED BY TROY HOLLOWAY TMS NO. H552X  
FAP NO. N/A TOD NO. 3438C

TS NO. 3438C DRAWING - OF SHEET NO. 2 OF 2

PLOTTED: Monday, July 03, 2006 AT 09:49 AM  
FILE: C:\TRANSDWG\25003\25003.41 MD 213 @ US 301 SB RAMP 7\mshg-p002\_md213sb-us301.dgn